

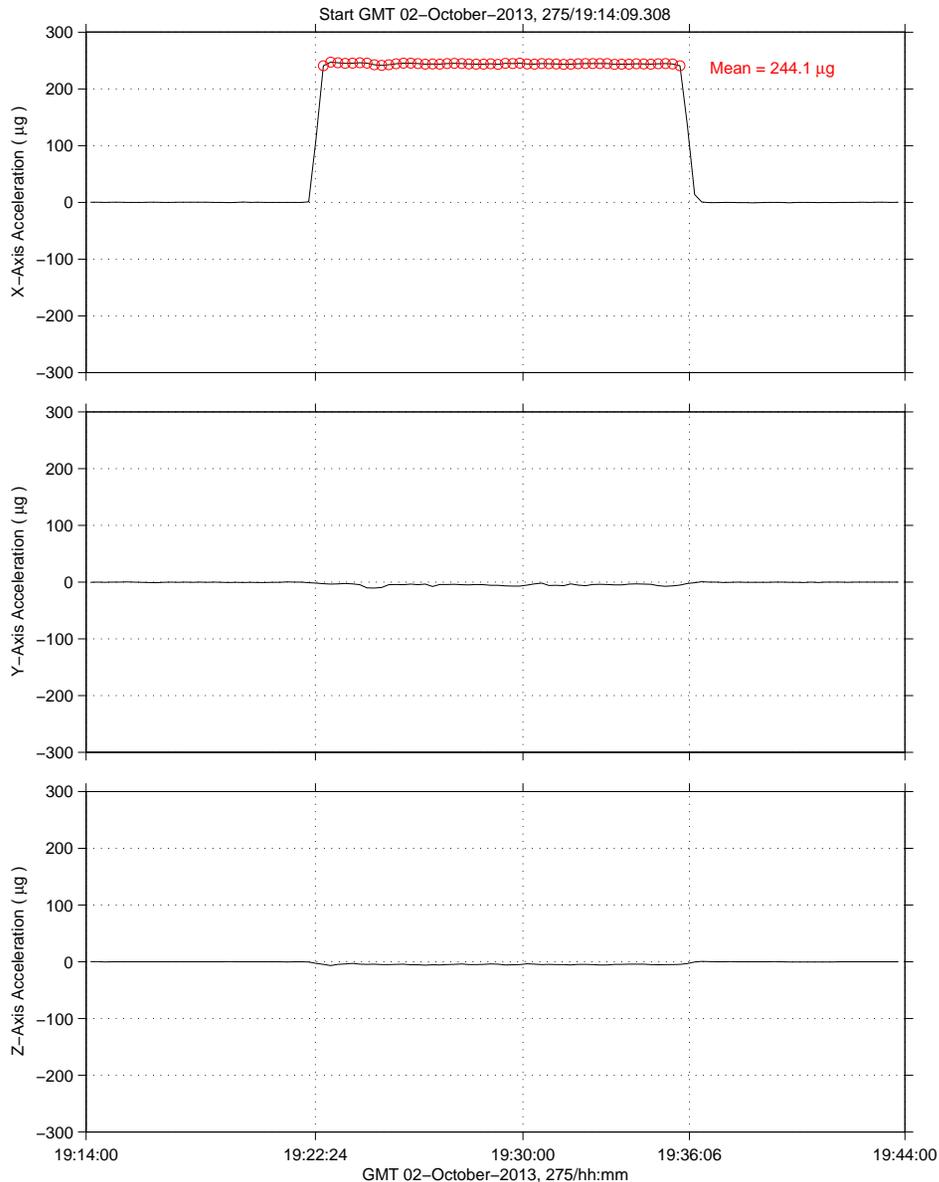
ATV-4 Reboost Quantify

mams, ossbtmf at LAB1O2, ER1, Lockers 3,4[135.28 -10.68 132.12]
0.0625 sa/sec (0.01 Hz)

mams_accel_ossbtmf, LAB1O2, ER1, Lockers 3,4, 0.0 Hz (0.1 s/sec)

SSAnalysis[0.0 0.0 0.0]

$$\Delta V = ((244.1 \times 10^{-6} \times 9.81) \times 13.33 \times 60) = 1.92 \text{ m/s}$$



Description

Sensor	MAMS, OSSBTMF 0.0625 sa/sec (0.01 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Plot Type	Acceleration versus time

Notes:

- The as-flown time line shows that the ATV-4 vehicle fired its thrusters to reboost the station with time of ignition (TIG) on GMT 02-Oct-2013 at 19:22 and a duration of about 13½ minutes. MAMS data shows TIG at about 19:22:24 and a duration closer to 13 minutes and 42 seconds.
- The average X-axis acceleration measured by MAMS during the reboost thruster firing was 244 μg .
- Note no significant offset on the Z-axis, and relatively minor perturbations observed on the Y-axis during the reboost event.

Regime:	Quasi-Steady
Category:	Vehicle
Source:	ATV-4 Reboost



ATV-4 (Albert Einstein) Reboost - Ancillary Information

On GMT 275, the ISS performed a nominal reboost using the ATV-4 OCS thrusters. The purpose of this reboost was to set up phasing for a 4-orbit rendezvous of the Soyuz 37S with a launch slated for GMT 311 (November 07). Also considered here were the Soyuz 35S landing occurring on GMT 315 (November 11), and the Progress 53P launch on GMT 324 (November 20). It was noted that the post burn trajectory is clear of conjunctions.

